

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028475**Date Inspected:** 25-Sep-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**Ultrasonic Testing**

This QA Inspector performed Ultrasonic Testing (UT) of approximately 100% of the weld previously tested by QC Ultrasonic technicians. This Complete Joint Penetration (CJP) is a 12mm thick flange splice designated as 13W-pp120-W2.0-FBF1.

This QA observed no rejectable indications at the time of testing.

This QA observed no recordable indications at the time of testing.

This QA tested from (Y=0mm~95mm)

This QA Inspector generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

This QA Inspector performed Ultrasonic Testing (UT) of approximately 0% of the weld previously tested by QC Ultrasonic technicians. This Complete Joint Penetration (CJP) is a 20mm thick "A" Deck Access Hole insert splice designated as 13W-pp124.5-W5-DAH.

Approximately 13:00 this QA halted testing on this location and was reassigned to duties involving observation of in-process welding. QA Rodney Patterson completed testing at this location. This QA performed an initial scan from one side of the weld joint from location (Y= 3010mm~3560mm).

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## WELDING INSPECTION REPORT

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Testing was inconclusive and this QA did not submit a TL-6027 UT report.

### In Process Visual Inspection

This QA observed, at random intervals, an ABF/JV qualified welder, Rick Clayborn #2773, performing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004-R. Welding was performed on the 20mm butt weld at 13E/14E-A.0.

This weld is a Seismic Performance Critical Member (SPCM) member.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters.

Dimensions of the repair excavations are as follows:

Y= 1700mm

L= 130mm

W= 20

D= 10mm

This QA observed, at random intervals, an ABF/JV qualified welder, Rick Clayborn #2773, performing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1004-R. Welding was performed on the 20mm butt weld at 13E-pp121.6.

This weld is a Seismic Performance Critical Member (SPCM) member.

During welding, ABF Quality Control (QC) Salvador Moreno was noted monitoring the welding parameters.

### ESW RWR Tracking

This QA was instructed by Task Leader Bill Levell to generate a spread sheet for the tracking of Request for Weld Repair (RWR) forms submitted by ABF for the repair of Electroslag Welds located at the base of the Tower.

This assigned task requires review of all submitted RWR's as well as review of approved QA TL-6031 report forms applicable to this welding, testing, and repair. This QA used the balance of time not allocated for in-process inspection and testing to work on this task.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Conversations were relevant to work performed.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Clifford, William	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell, Bill	QA Reviewer

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